BLACK BOX
NETWORK SERVICES

Firmware Revision Information

Product Code(s): *ACR1002A*

Product Name(s): *ServSwitch Agility Dual Transmitters and Receivers*

Date Modified: *April 30th, 2013*

Version 2.8.21131

Note: This version is intended to be used with iPath controller firmware version 2.4.

Added:

- Support for VNC server on dual-head transmitter units. Agility dual with an embedded VNC is a high performance KVM server that can be accessed remotely via IP with a VNC viewer and / or simultaneously with an Agility receiver. Its base feature set is the same as the Agility dual with the addition of:

* View 2560x1600 or two 1920x1200 sessions
* Real VNC server with RFP 3.3 support
* Up to 256bit AES and RSA 2048 encyrption
* VM support and RS232 for power control
* Supports 16 users simultaneously
* Out of band BIOS level access
* Compatible with Agility iPath Matrix

- Added support for hotkey switching. Support is added for hotkey switching which allows for much faster channel or preset changes. This feature is only applicable when in use with iPath 2.4.
- Eizo Flex scan T2351 Touch screens are now supported

Known Issues:
- Microsoft 600 wired keyboard is not supported

Version 2.7.19614

Note: This version is intended to be used with iPath controller firmware version 2.3.

Added:

- Support for a new compression algorithm (AFZ) on Agility Dual ACR1002A-T. A new lossless compression scheme is supported in this release of iPath firmware for the Agility Dual ACR1002A-T. There are no user interactions as the choice of compression scheme is automatic depending on the type of data and type of Agility unit that is being interfaced.
- Added the ability to clone video outputs. It is now possible to view the same video content on each of the video heads. This is useful if you are using screens back to back, attaching another extender or transmission device like our digital IP gateways. By splitting the video at the receiver, you will only need to transmit the video to one transmitter, therefore limiting the data required to transmit the video to two screens (or other devices).

- Added dual link video mode of 2560x2048@50Hz. It is not possible to support this resolution at 60Hz.
- Added USB Multi-Port configuration. In some cases it is necessary to turn off the USB merging (e.g. when using two identical touch screens). When this is enabled the USB merging is disabled on the bottom two USB ports of the receiver only. The port numbers of the devices are kept the same on the USB host which allows for two identical touch screens to be connected to the Agility Dual system. This is only applicable when using the Agility Dual in point to point mode. There is no support for this in iPath firmware version 2.3 at the moment.
- Added the ability to attach combined USB devices which include isochronous endpoints. While isochronous USB is still not supported, we have added the ability to ignore isochronous endpoints. Some USB devices like iPhones and Bloomberg keyboards have multiple USB devices reported. If only one of these devices was isochronous (e.g. supports audio) the entire device was rejected by the system. Now we have added the ability to ignore isochronous endpoints so while the audio part of the device will still not work, the other functions will. An iPhone can now be used as a memory device.

Improvements:
- Video modes 600x480 and 800x600 now support 60Hz refresh rate
- Dual screen 1920x1200 video resolutions no longer causes network packet loss
- Scroll bars added to OSD when running on screens with lower than 800x600 resolution
- Hot plug detect settings option of 1 second added
- Support for USB Wacom Intuos tablets has been improved
- The num lock status in the OSD is now correct
- improved support for Logitech keyboards at channel changes

Known Issues:
- It is not possible to access the bios on a Dell 990
- Eizo Flex scan T2351 Touch Screen is not supported
- Logitech set point drivers are not supported

Version 2.6.18144

- Mouse protocol mode detection made more reliable when rebooting a USB computer system. When the USB host is rebooted, it was possible for the wrong mouse protocol to be set which meant that while the mouse worked in the OSD menu, it did not work with the PC
- Added support for 3M multi-touch screen monitors
- Support now for the Logitech G9, G500 and Microsoft Sidewinder mice between switching channels. It was observed that these mouse types often stopped working when a channel change was made. The USB code has been made more reliable to cope with these mice.

Version 2.4.17650

- Faster USB switching time. When switching between transmitters, the mouse enumeration time has been reduced to 2 seconds

Version 2.3.17480

- New dual-link EDIDs added (2048x1536, 2048x2048, and 2560x1440). Resolutions now added to drop down menu
- Video compatibility check on receivers. This is disabled by default. The receiver will now check if the monitor can display the requested video resolution and an out of range error appears if it cannot display. This prevents an OSD lockout if an incompatible resolution is used

- New USB HID Emulation. The transmitter will now emulate HID devices leaving them permanently connected when the receivers are changed away. This enables faster keyboard and mouse switching and allows for more than 13 identical USB devices to be attached. If the keyboards and mice are identical, they are only enumerated once by the host. This operation is only applicable to HID devices (keyboards and mice). Mass storage devices and others will still enumerate when switched.
- New settings on receivers to "allow HID devices only". Setting to allow all USB devices or "HID only" by receiver
- Single mode fiber support added for SFP fiber module. Improved behavior when re-booting Agility Dual no longer causes the loss of the fiber connection. Fail over options prefer fiber and prefer copper made much more robust.
- ACR1002A-T (Transmitter Only): Magic Eye (anti-dither support added) this is enabled by default. The magic eye feature increases performance and reduces network traffic when Agility Dual is used with Apple Macs and other host computers that have dithered video output. It also improves performance if the video source is noisy (i.e.: from a VGA to DVI converter). Dithering is a technique used by some graphics cards to improve perceived image quality by continuously slightly varying the color of each pixel. This gives the illusion of more shades of color than the display can really reproduce; and smoothes the appearance of gradually shaded areas in images. Unfortunately dithering is an issue for KVM extenders such as Agility because it makes the image appear to be changing all the time even when it is static, creating much more network data than can be carried by a Gig Ethernet Switch. The result is a reduction in video frame rate, which the user sees as slow mouse response. Magic Eye works by ignoring small variations in the video from frame to frame. It is enabled by default as it is not obvious to the user that his poor mouse behavior is caused by dithering. In most cases Magic Eye is invisible, but it can of course give slight color inaccuracies on the monitor. For full color accuracy, Magic Eye can be disabled for video sources which are not dithered or noisy.

Version 2.1.15691

- Original Shipping Release